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10/726,372	12/03/2003	Fatih Ozluturk	I-2-0566.IUS	7154

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EXAMINER

STEIN, JULIE E

ART UNIT PAPER NUMBER

2617

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/726,372

Applicant(s)

OZLUTURK ET AL.

Examiner

Julie E. Stein, Esq.

Art Unit

2688

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. In view of the amendments to the specification, the objections to the specification are withdrawn.

### ***Claim Objections***

2. In view of the amendment to the claims and the cancellation of claim 11, the previous objections to the claims are withdrawn.
3. However, a new objection to claim 6 is presented.
4. Claim 6 is objected to because the limitation, "the electronic device," in line 3 does not appear previously in the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-4, 6, 8-10, and 12-16 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 6,560,453 to Henry, Jr. et al.

Henry discloses or teaches all the elements of independent claim 1, including an electronic device (column 3, line 61 to column 4, line 5) to comprising:

a user input device for receiving input from a user (Figure 2, element 42, keypad);

a user device processing unit for performing functions of the electronic device (Figure 2, element 56, processor);

a use pattern monitoring device for monitoring use patterns of the user, monitoring device parameter settings, and correlating use patterns with device parameter settings (Figure 3, element 86 and column 8, lines 25 to 67, which describes

the usage pattern performance mode, including measuring call usage statistics, such as incoming calls and paging channel monitoring frequency and their correlations—  
alternatively, one of ordinary skill in the art at the time the invention was made would have understood that one way to reduce the paging channel monitoring frequency would have been to dynamically monitor the usage pattern of a user's phone as described in the "usage pattern performance mode module" and that this would include monitoring use patterns, parameter states of the phone and correlating the information in order to determine how to dynamically adjust the phone to minimize paging channel monitoring frequency, see, column 8, lines 25 to 67);

an associated memory for storing use pattern, device parameter state, and correlation information (Figure 3, element 54);

a cognitive logic device for analyzing the use pattern, parameter state, and correlation information and for determining adjustments to the user device processing unit corresponding to particular user input (Figure 3, element 74, SCI Manager, more specifically the time of day performance mode module 82, see column 8, lines 61 to 67);  
and

a user device processing unit controller for adjusting the user device processing unit in response to receipt of the particular user input in accordance with the determined adjustments (Element 56).

The rejection of claims 1 is hereby incorporated. Henry discloses or teaches all the elements of independent claim 6 including, a wireless transmit/receive unit (WTRU) (column 3, line 64 to column 4, line 5) comprising:

a user input device for receiving input from a user (Figure 2, element 42, keypad);

a user device processing unit for performing functions of the electronic device (Figure 2, element 56, processor);

a use pattern monitoring device for monitoring use patterns of the user, monitoring device parameter settings, and correlating use patterns with device parameter settings (Figure 3, element 86 and column 8, lines 25 to 67, which describes the usage pattern performance mode, including measuring call usage statistics, such as incoming calls and paging channel monitoring frequency and their correlations—alternatively, one of ordinary skill in the art at the time the invention was made would have understood that one way to reduce the paging channel monitoring frequency would have been to dynamically monitor the usage pattern of a user's phone as described in the "usage pattern performance mode module" and that this would include monitoring use patterns, parameter states of the phone and correlating the information in order to determine how to dynamically adjust the phone to minimize paging channel monitoring frequency, see, column 8, lines 25 to 67);

an associated memory for storing use pattern, device parameter state, and correlation information (Figure 3, element 54);

a cognitive logic device for analyzing the use pattern, parameter state, and correlation information and for determining adjustments to the user device processing unit corresponding to particular user input (Figure 3, element 74, SCI Manager, more specifically the time of day performance mode module 82, see column 8, lines 61 to 67); and

a user device processing unit controller for adjusting the user device processing unit in response to receipt of the particular user input in accordance with the determined adjustments (Element 56).

The rejection of claims 1 and 6 are hereby incorporated. Henry discloses all the elements of independent claim 12, including an integrated circuit (column 4, lines 17 to 52) comprising:

an input configured to receive input from a user (Figure 2, element 42, keypad);  
a processing unit, coupled to the input, for performing functions of an electronic device (Figure 2, element 56, processor);

a use pattern monitoring device, coupled to the processing unit, for monitoring use patterns of the user, monitoring device parameter settings, and correlating use patterns with device parameter settings (Figure 3, element 86 and column 8, lines 25 to 67, which describes the usage pattern performance mode, including measuring call usage statistics, such as incoming calls and paging channel monitoring frequency and their correlations—alternatively, one of ordinary skill in the art at the time the invention was made would have understood that one way to reduce the paging channel

Art Unit: 2688

monitoring frequency would have been to dynamically monitor the usage pattern of a user's phone as described in the "usage pattern performance mode module" and that this would include monitoring use patterns, parameter states of the phone and correlating the information in order to determine how to dynamically adjust the phone to minimize paging channel monitoring frequency, see, column 8, lines 25 to 67);

an associated memory for storing use pattern, device parameter state, and correlation information (Figure 3, element 54);

a cognitive logic device, coupled to the associated memory, for analyzing the use pattern, parameter state, and correlation information and for determining adjustments to the processing unit corresponding to particular user input (Figure 3, element 74, SCI Manager, more specifically the time of day performance mode module 82, see column 8, lines 61 to 67); and

a processing unit controller, coupled to the cognitive logic device and processing unit, for adjusting the processing unit in response to receipt of the particular user input in accordance with the determined adjustments (Figure 3, element 56).

The rejections of claims 1, 6, and 12 are hereby incorporated. Henry discloses or teaches all the steps of independent claim 13, including a method for use with an electronic device, the electronic device performing steps comprising:

receiving user inputs at an electronic device indicating interactions of a user with processing of the electronic device (column 6, lines 19 to 25);



monitoring use patterns of the user, monitoring device parameter settings, and correlating use patterns with device parameter settings (column 8, lines 25 to 67, which describes the usage pattern performance mode, including measuring call usage statistics, such as incoming calls and paging channel monitoring frequency and their correlations—alternatively, one of ordinary skill in the art at the time the invention was made would have understood that one way to reduce the paging channel monitoring frequency would have been to dynamically monitor the usage pattern of a user's phone as described in the "usage pattern performance mode module" and that this would include monitoring use patterns, parameter states of the phone and correlating the information in order to determine how to dynamically adjust the phone to minimize paging channel monitoring frequency, see, column 8, lines 25 to 67):

analyzing use pattern, parameter state, and correlation information (Id.);

determining adjustments for the electronic device corresponding to the particular user input (Figure 3, element 74, SCI Manager, more specifically the time of day performance mode module 82, see column 8, lines 61 to 67);

adjusting the electronic device in response to particular user input in accordance with the determined adjustments (Figure 3, element 56).

Henry also discloses/teaches all the elements/steps of dependent claims 2, 8, and 14, including wherein the determined adjustments include changes to parameters, configurations and states of the user device processing unit. See, column 5, lines 49 to 65, which describes the timing of a given sleep cycle of the mobile phone.

Henry also discloses/teaches all the elements/steps of dependent claims 3, 9, and 15, including wherein the cognitive logic device uses a cognitive model that creates rules based on an observed interactions of the user. See, column 8, lines 25 to 67, which describes the dynamic usage pattern performance mode module.

Henry also discloses/teaches all the elements/steps of dependent claims 4, 10, and 16, including wherein the user device unit controller selectively turns off rules in response to user interaction through the user input device. See, *Id.*

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henry.

Henry does not explicitly teach all the elements of claim 7, including wherein the processing unit comprises a digital signal process and a reduced instruction set processor. However, the Examiner takes Official Notice that both DSPs and RISCs are well known in the art and that it would have been obvious to one of ordinary skill in the art at the time the invention was made that such processors would be used in PDAs and mobile phones.

10. Claims 5 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henry in view of U.S. Patent No. 5,952,992 to Helms.

Henry teaches all the elements of claims 5 and 17, except wherein the cognitive logic device categorizes the use pattern information into either common interaction patterns or style interaction patterns and adjusts the electronic device based on the common interaction patterns and selectively adjusts the electronic device based on the style interaction patterns in response to a current user interaction style.

However, Helms teaches that, for example, a brightness of a LCD in a laptop computer—an electronic device-- may be controlled by an artificial intelligence such as a neural network and that the neural network can learn a user's preferred brightness settings in various lighting conditions and thus automatically adjust the LCD to the user's preferences in such given lighting conditions. See column 5, lines 8 to 15. Helms also teaches that user preferences will be considered and may override pre-set brightness levels. See column 2, lines 19 to 27.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify Henry to include the added functionality of being able to adjust the brightness of an LCD screen of the mobile phone (display 44) as taught by Helms because this would both allow the user's preferences to be used and decrease the overall power consumption of the electronic device. See Helms, column 1, lines 29 to 37. In addition, one of ordinary skill in the art at the time the invention was made would have understood that the interaction taught in Henry would be considered a common interaction and the interaction taught in Helms would have been considered a style interaction because the sleep cycle taught in Henry is common and required of all mobile phones and adjusting the brightness of an LCD screen of a mobile phone is a preference of a given user at a given time, thus a style interaction. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to understand that the adjusting of the electronic device based on the common interaction patterns would always be done, where as the adjusting of the electronic device based on the style interaction patterns would depend on the current user

interaction style because of the difference between common and style patterns as discussed above.

The rejections of 1-17 are hereby incorporated. Henry in view of Helms teach all the steps of independent claim 18, including a method for use with an electronic device, the electronic device performing steps comprising: receiving user inputs from a plurality of users at the electronic device indicating interactions of the users with processing of the electronic device (see above); determining interaction patterns of the user with the electronic device (see above); categorizing the determined interaction patterns as either common interaction patterns or style interaction patterns (see rejections of claims 5 and 17); based on the determined interaction patterns, determining adjustments for the electronic device (Id.); categorizing the determined adjustments as either common adjustments or style adjustments (Id.); and adjusting the electronic device using the common adjustments and selectively applying the style adjustments in response to a current user interaction style (Id).

### ***Response to Arguments***

11. Applicant's arguments filed 12/16/05 have been fully considered but they are not persuasive.

12. Applicant argues that Henry does not disclose or teach a device that analyzes user use patterns, device parameter states or correlates this information to determine appropriate usage parameter adjustments. The Examiner respectfully disagrees. As discussed above, Henry analyzes usage statistics to determine the minimum monitoring of the paging channel required in order to save power. As Applicant's claims do not

Art Unit: 2688

currently limit the type of use pattern or parameter setting, Henry meets the claim limitations.

13. In addition, Henry indicates that it is recording usage statistics based on "the user's calling pattern." See, column 8, line 34. While the user may indicate a calling pattern mode, the user may also request the mode that does not select a mode at all, but allows the phone to set the times automatically "based on a profile of the user's calling patterns." See column 8, lines 33 to 34.

14. In addition, as discussed above, the reference at least supplies sufficient support and motivation to one of ordinary skill in the art to render the claimed invention obvious as Henry's usage pattern performance mode module meets the recited limitations of the claims, for example, while monitoring a phone's usage statistics and parameter settings (e.g. power and paging signal channel) and then correlating these to reduce the times at which the phone needs to monitor the paging channel in order to reduce the power consumption in view of the operating environment (how often the phone is in use). See abstract.

### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2688

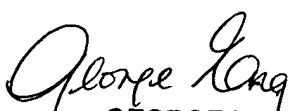
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie E. Stein, Esq. whose telephone number is (571) 272-7897. The examiner can normally be reached on M-F (8:30 am-5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JES



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